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ABSTRACT

This brief provides results from the most recent National Center for Education Statistics (NCES) survey of technology in private schools, focusing on trends in the availability of and access to technology from 1995 to 1998. In addition, it reports on the future connectivity plans of private schools not connected to the Internet and on the advanced telecommunications training opportunities private schools offer their teachers. The brief describes the marked increase in access to computers and the Internet among private schools and their students from 1995 to 1998. Over that time, the average student to computer ratio decreased from 9:1 to 6:1, while the percent of schools with access to the Internet increased from 25% to 67%. (AEF)

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Computer and Internet Access in Private Schools and Classrooms: 1995 and 1998. Stats in Brief

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NATIONAL CENTER FOR EDUCATION STATISTICS

Stats *in Brief*

Computer and Internet Access in Private Schools and Classrooms: 1995 and 1998

February 2000

In recent years, interest in increasing the use of technology in elementary and secondary education has grown. Numerous initiatives—both public and private—have provided discounted or free computers and Internet access to schools and have encouraged the provision of technology-focused teacher professional development and training (Trotter 1999). These initiatives were predicated on the expectation that the use of technology in education can lead to a number of beneficial outcomes. In *Getting America's Students Ready for the 21st Century,* for example, the U.S. Department of Education (1996) asserts that technology has the potential to enhance the achievement of all students, increase families' involvement in their children's schooling, improve teachers' skills and knowledge, and improve school administration and management.

To track changes in the availability of and access to technology, the National Center for Education Statistics (NCES) since 1994 has conducted a series of surveys of public and private elementary and secondary schools. This Stats in Brief provides results from the most recent survey of technology in private schools, focusing on trends in the availability of and access to technology from 1995 to 1998.[1] In addition, this Stats in Brief reports on the future connectivity plans of private schools not connected to the Internet and on the advanced telecommunications training opportunities private schools offer their teachers.

How prevalent are computers in private schools?

The number of students per computer is the measure commonly used to provide an indication of the prevalence of computers in schools. In 1998, there was an average of six students per computer in private schools, down from nine students per computer in private schools in 1995 (table 1). In 1995 and in 1998, nonsectarian schools reported fewer students per computer on average than did Catholic schools and other religious schools, and the student-to-computer ratio was lower on average in private secondary than in private elementary schools.

Table 1.—Ratio of private school students to computers and to instructional computers, by school characteristics: 1995 and 1998

School characteristics	Number of students per computer		Number of students per instructional computer
	1995	1998	1998
All private schools	**9**	**6**	**8**
Affiliation			
Catholic	10	7	8
Other religious	9	7	9
Nonsectarian	6	4	6
Instructional level			
Elementary	9	7	8
Secondary	7	5	7
Combined	8	5	7
Type of locale			
City	9	6	7
Urban fringe	8	6	8
Town	9	7	8
Rural	9	5	7
Percent minority enrollment			
Less than 6 percent	9	7	8
6 to 20 percent	7	6	7
21 to 49 percent	8	6	7
50 percent or more	11	8	10

NOTE: In the 1995 survey, schools were not asked to differentiate the number of instructional computers from the total number of computers. These ratios are based on the total number of students attending regular private schools, and not just those attending regular private schools that have computers or instructional computers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Advanced Telecommunications in U.S. Private Schools: 1998–1999" (FRSS 68); 1999; and *Advanced Telecommunications in U.S. Private Schools, K–12, Fall 1995* (NCES 97–394), 1999, table 10.

Another common measure of the prevalence of computers in schools is the number of students per *instructional* computer.[2] This measure excludes computers that may be used exclusively for administrative or other noninstructional purposes. In 1998, the average number of private school students per instructional computer was eight (table 1). In *public* schools, there was an average of six students to each instructional computer in 1998 (Rowand 1999). Nonsectarian private schools had a lower average student-to-instructional computer ratio (6:1) than did Catholic schools (8:1) and other religious schools (9:1). In addition, the student-to-instructional computer ratio was higher in private elementary schools (8:1) than in private secondary or combined schools (7:1).

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How prevalent is Internet access in private schools and classrooms?

The percentage of schools and the percentage of instructional rooms[1] with connections to the Internet are two measures commonly used to provide an indication of Internet access in schools. In 1998, 67 percent of private schools were connected to the Internet, up from 25 percent in 1995 (table 2). This 67 percent of private schools connected to the Internet enrolled 81 percent of all private school students (not shown in tables). In 1998, 89 percent of *public* schools had access to the Internet (Rowand 1999), representing 91 percent of all public school students.

Table 2.—Among private schools, percentage of schools and instructional rooms with Internet access, and among private schools without Internet access, percent that have plans to gain access, by school characteristics: 1995 and 1998

School characteristics	Schools with Internet access		Instructional rooms with Internet access*		Schools without access that have plans to gain Internet access
	1995	1998	1995	1998	1998
All private schools	**25**	**67**	**5**	**25**	**46**
Affiliation					
Catholic	35	83	4	27	74
Other religious	16	54	2	18	41
Nonsectarian	32	66	13	41	38
Instructional level					
Elementary	23	64	3	21	46
Secondary	57	90	6	32	31
Combined	19	64	8	28	46
Type of locale					
City	32	72	6	27	64
Urban fringe	26	63	4	25	46
Town	22	65	5	21	38
Rural	4	58	1	21	12
Percent minority enrollment					
Less than 6 percent	24	59	3	28	13
6 to 20 percent	29	75	9	27	71
21 to 49 percent	29	76	3	32	59
50 percent or more	18	52	2	10	59

*The percentage of instructional rooms is based on the total number of instructional rooms (e.g., classrooms, computer labs, library/media centers) in all regular elementary, secondary, and combined private schools.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Advanced Telecommunications in U.S. Private Schools: 1998–1999" (FRSS 68); 1999 and *Advanced Telecommunications in U.S. Private Schools, K–12, Fall 1995* (NCES 97–394), 1999, table 11.

The availability of Internet access in private schools varied somewhat by school characteristics. In 1995, Catholic and nonsectarian schools were more likely than those with other religious affiliations to have Internet access, while in 1998 Catholic schools were more likely than both nonsectarian and other religious schools to be connected to the Internet. In 1995 and in 1998, secondary schools were more likely than elementary and combined schools to have Internet access (table 2). Rural private schools were less likely than private schools in other locations to be connected to the Internet in 1995. In 1998, however, rural private schools were about as likely as private schools in other locations to be connected to the Internet.

Table 2 shows that the percentage of instructional rooms with access to the Internet in private schools increased, from 5 percent in 1995 to 25 percent in 1998. In that same year, 51 percent of *public* school instructional rooms were connected to the Internet (Rowand 1999). In 1998, 41 percent of instructional rooms in nonsectarian schools were connected to the Internet, compared with 27 percent of instructional rooms in Catholic schools and 18 percent of instructional rooms in other religious schools. Ten percent of instructional rooms in private schools with 50 percent or more minority enrollment had Internet access, compared with 27 to 32 percent of instructional rooms in schools with less than 50 percent minority enrollment.

Other ways to look at the availability of Internet access in private schools are the number of private school students per computer with Internet access and the number of private school students per *instructional* computer with Internet access. In 1995, there were about 99 private school students per computer with Internet access (table 3). By 1998, there were 12 private school students per computer with Internet access. In 1998, the ratio of students to *instructional* computer with Internet access was 15 to 1 (table 3).

Table 3.—Ratio of private school students to computer with Internet access, and to instructional computer with Internet access, by school characteristics: 1995 and 1998

School characteristics	Number of students per computer with Internet access		Number of students per instructional computer with Internet access
	1995	1998	1998
All private schools	**99**	**12**	**15**
Affiliation			
Catholic	174	16	19
Other religious	171	14	18
Nonsectarian	25	5	7
Instructional level			
Elementary	206	20	24
Secondary	78	7	10
Combined	48	8	10
Percent minority enrollment			
Less than 6 percent	141	14	16
6 to 20 percent	58	11	14
21 to 49 percent	135	9	12
50 percent or more	235	28	33

NOTE: In the 1995 survey, schools were not asked to differentiate the number of instructional computers from the total number of computers. These ratios are based upon the total number of students attending regular private schools, and not just those attending regular private schools that have computers or instructional computers.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Advanced Telecommunications in U.S. Private Schools: 1998–1999" (FRSS 68); 1999; and *Advanced Telecommunications in U.S. Private Schools, K–12, Fall 1995* (NCES 97–394), 1999, table 10.

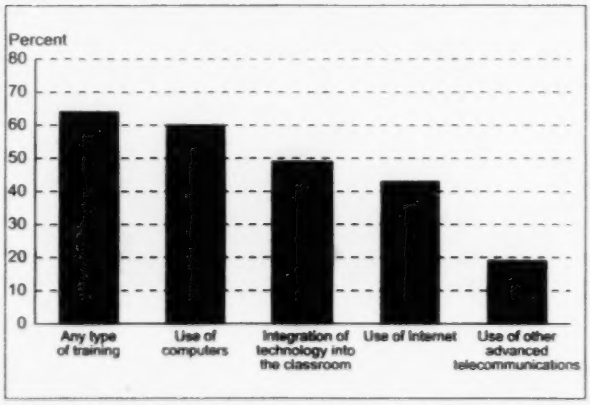
Do private schools not connected to the Internet have plans to do so in the future?

While more private schools were connected to the Internet in 1998 than in 1995, 33 percent of private schools did not have Internet access in 1998. Of these schools, about half (46 percent) have plans to obtain access to the Internet in the future (table 2). Plans to connect to the Internet varied somewhat by school characteristics. Catholic schools were more likely to indicate that they had plans to connect to the Internet (74 percent) than other religious schools (41 percent) and nonsectarian schools (38 percent). Private schools in rural locations were less likely to indicate plans to acquire Internet access than were schools in city and urban fringe locations.

What advanced telecommunications training for teachers do private schools offer or participate in?

To provide information about the preparedness of private school teachers to use technology in their classrooms, items about the types of advanced telecommunications training private schools offered or participated in were included for the first time on the 1998 survey. In 1998, 64 percent of private schools offered or participated in some type of advanced telecommunications training for teachers (figure 1).

Figure 1.—Percentage of private schools offering or participating in advanced telecommunications training for teachers, by type of training: 1998



SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System, "Survey on Advanced Telecommunications in U.S. Private Schools: 1998–1999" (FRSS 68), 1999.

The most common type of training was on the use of computers, with 60 percent of private schools offering or participating in this type of training. Catholic schools were more likely than nonsectarian schools and other religious schools to offer or participate in training for teachers in computers, Internet access, and integrating technology into the curriculum (not shown in tables).

Additional Information

This Stats in Brief has described the marked increase in access to computers and the Internet among private schools and their students from 1995 to 1998. Over that time, the average student to computer ratio decreased from 9:1 to 6:1, while the percent of schools with access to the Internet increased from 25 to 67 percent. A full report on the results of the 1998 survey, *Survey on Advanced Telecommunications in U.S. Private Schools: 1998–99*, will be released by NCES in the spring of 2000. The report will include additional information on computer and Internet availability, the use of advanced telecommunications, sources of support for advanced telecommunications, and on similarities and differences with public schools.

[1] The first survey of private schools was administered in October of 1995, and the second was administered in February of 1999. Because the second survey was administered during academic year 1998–99, it is referred to in this Stats in Brief as the 1998 survey. See Heaviside and Farris (1997) for a complete report on the results of the 1995 survey.

[2] In the 1998 survey, schools were asked how many computers in the school are used for "instructional purposes."

[3] Instructional rooms include classrooms, computer labs, library/media centers, and any other rooms used for instructional purposes (e.g., gymnasium).

References

Heaviside, S., and Farris, E. 1997. *Advanced Telecommunications in U.S. Private Schools, K–12, Fall 1995* (NCES 97–394). U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

Rowand, C. 1999. *Internet Access in Public Schools and Classrooms: 1994–98* (NCES 1999–017). U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

Trotter, A. 1999. "Preparing Teachers for the Digital Age." *Education Week* 19: 37–43.

U.S. Department of Education. *Getting America's Students Ready for the 21st Century: Meeting the Technology Literacy Challenge*. Washington, DC: 1996.

Stats in Brief present information on education topics of current interest. All estimates shown are based on samples and are subject to sampling variability. All differences are statistically significant at the 0.05 level. In the design, conduct, and data processing of NCES surveys, efforts are made to minimize the effects of nonsampling errors, such as item nonresponse, measurement error, data processing error, or other systematic error.

This Stats in Brief was prepared by Doug Levin of AIR, David Hurst of ESSI, and Shelley Burns of NCES. To obtain standard errors or definitions of terms for this Issue Brief, or to obtain additional information about Fast Response Survey System or the FRSS telecommunications surveys, contact Shelley Burns at NCES 202-219-1463 or http://Shelley_Burns@ed.gov. To order additional copies of this Issue Brief or other NCES publications, call 1-800-433-7827. NCES publications are available on the Internet at http://nces@ed.gov/.

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